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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/160,312	09/25/98	JINNO	Y 5586D-6921

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EXAMINER

PARKER, K

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 01/04/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/160,312

Applicant(s)  
Yushi et al

Examiner  
Kenneth Parker

Group Art Unit  
2871

☒ Responsive to communication(s) filed on Oct 23, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-6 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-6 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Serial Number: 09/160,312

Art Unit: 2871

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language "two or more conductive layers corresponding to a plurality of conductive layers constituting each thin film transistor" (claim 1) and "comprising two or more conductive layers similar to.." is indefinite. There is no way to determine what constitutes "correspondence" or similarity, therefore, there is no way to determine the scope of the claim. If the layers are formed of two or more layers used to form the thin film transistor (driving or switching), stating so will overcome this rejection.

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*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S.

Patent # 5,748,179

This reference discloses:

- A liquid crystal with a pair of substrates and liquid crystal between them, polarizing plates around the cell (see figures)
- Switching TFT's and terminals which use layers of the transistors as the terminal layers.

Therefore, these claims are anticipated by this reference.

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*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki et al, U.S. Patent # 5,247,375 in view of Tanigushi et al, US patent #5,187,604, Ito et al, US Patent # 5,748,179, Kweon, US Patent # 5,811,318, and Wakagi et al, US Patent #5,777,702.

The primary reference discloses:

- A liquid crystal with a pair of substrates and liquid crystal between them, polarizing plates around the cell, TFT driving and switching circuits with the same structure.

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The primary reference lacks: the indication that the terminals have a portion having a lamination structure similar to the TFTs.

The secondary references all show multilayer external circuits using the films used in the TFTs. The terminals required a multilayer structure for passivation, strength and conductivity, and so multiple layers were used. The references teach reasons of protection and moisture resistance. The TFT layers were used because they were there, and therefore there was no reason to add additional unnecessary layers, and for the reduction of patterning steps.

Therefore, it would have been obvious, in the devices and or methodologies taught by the primary reference, to employ the modification disclosed by the secondary reference for the benefit stated.

**5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al, U.S. Patent # 5,701,167, in view of Tanigushi et al, US patent #5,187,604, Ito et al, US Patent # 5,748,179, Kweon, US Patent # 5,811,318, and Wakagi et al, US Patent #5,777,702.**

The primary reference discloses:

- A liquid crystal with a pair of substrates and liquid crystal between them, polarizing plates around the cell, TFT driving and switching circuits with the same structure.

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The primary reference lacks: the indication that the terminals have a portion having a lamination structure similar to the TFTs.

The secondary references all show multilayer external circuits using the films used in the TFTs. The terminals required a multilayer structure for passivation, strength and conductivity, and so multiple layers were used. The references teach reasons of protection and moisture resistance. The TFT layers were used because they were there, and therefore there was no reason to add additional unnecessary layers, and for the reduction of patterning steps.

Therefore, it would have been obvious, in the devices and or methodologies taught by the primary reference, to employ the modification disclosed by the secondary reference for the benefit stated.

Still lacking from the disclosure is the explicit indication that the terminals are 8.mm or more away from the driving circuits. Yamazaki shows the region with the driving portion a considerable distance away from the terminals (see cover figure). Even if this were not taken as an indication to form the terminals .8mm or more from the driving circuits, it was well known to employ sealants around the driving circuits, and therefore it would have been necessary to form the driving circuits a sufficient width away from the terminals to enable interposing elements which are required, such as sealants or other crossing lines.

### *Response to Election*

Applicant's election of group 1 is acknowledged.

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*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Parker whose telephone number is (703) 305-6202. The fax phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

January 1, 2001

  
KENNETH ALLEN PARKER  
PRIMARY PATENT EXAMINER  
GAU 2871